

ABSTRACT OF THE DISCLOSURE

Provided in a photomask for use in production of a hologram element having desired optical characteristics, a method for producing a hologram element, and a hologram element having desired optical characteristics. The first photomask is used for photolithography-based production of a hologram element having a hologram divided into two regions carrying a diffraction grating. The first photomask includes the first, second mask region having the non-light-transmitting mask portion and the light-transmitting portion, for forming the diffraction gratings of the regions of the hologram. The two mask regions differ in alignment-direction-wise arrangement interval for the light-transmitting portions and in ratio of the alignment-direction-wise width to the alignment-direction-wise arrangement interval for the light-transmitting portions.